

# FEATURES OF THE PERCEPTION OF RADIATION RISKS BY RUSSIAN RADIATION SAFETY SPECIALISTS

#### ARTEM DAVYDOV

RESEARCH INSTITUTE OF RADIATION HYGIENE AFTER P.V. RAMZAEV SAINT-PETERSBURG, RUSSIA

**Kaunas 2019** 

## DATA ON SAMPLE

Place of work			
Regulators (administrative work)	Inspectors (lab measurements)		Scientists
26.1%	31.2%		32.6%
Education			
Medical and Bio	Physical and Technical		Liberal arts
65.2%	26.8%		5.8%
Experience in the field of radiation protection			
<5 years		>5 years	
22.5%		71.7%	
Sex			
Male		Female	
48.6%		50.0%	

## **HYPOTHESES**

Positive attitude to the development of nuclear energy

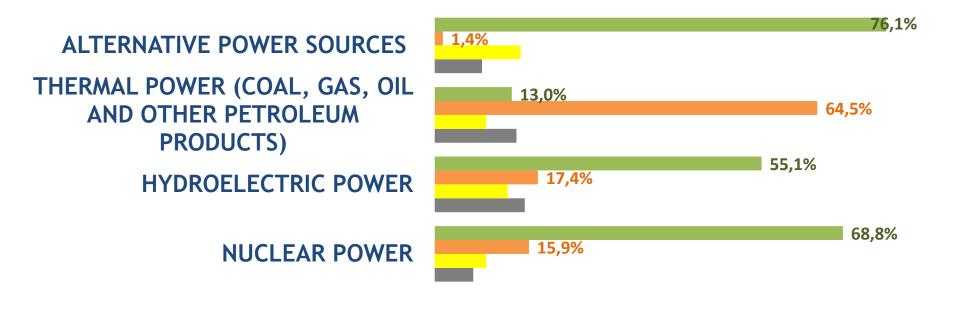
Hormesis and threshold theory are popular

Ignoring the competition of risks

#### **ATTITUDE TOWARD NUCLEAR ENERGY**

Do you think which types of energy should be developed in the Russian Federation and which should be banned/prohibited, if possible?

## **ATTITUDE TOWARD NUCLEAR ENERGY**



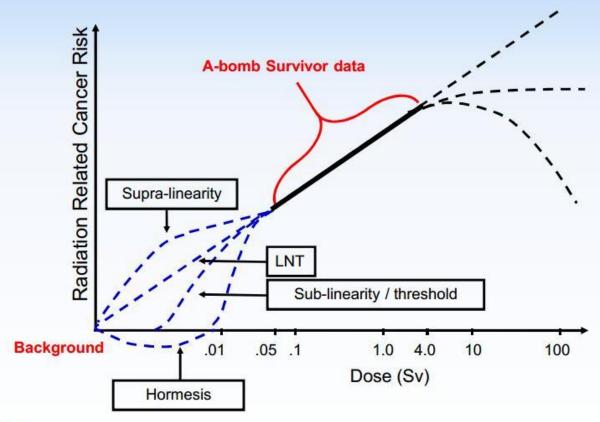
- It is necessary to develop If possible, reduce
- Difficult to answer
- Missing

## Unconventional theories or LNT

In the modern radiation protection system, a linear non-threshold hypothesis is used to asses the effects of low doses of ionizing radiation on human health. This hypothesis is not confirmed, but not denied. Which of existing hypothesis do you personally prefer?

## Unconventional theories or LNT

The dilemma for radiation protection: what is the scientific basis for radiation standards to protect the public from exposures to low levels of ionizing radiation (<0 100 mSv) where there are considerable uncertainties in the epidemiological data.





## SUMMER IN THE VILLAGE: SAFE OR NO?

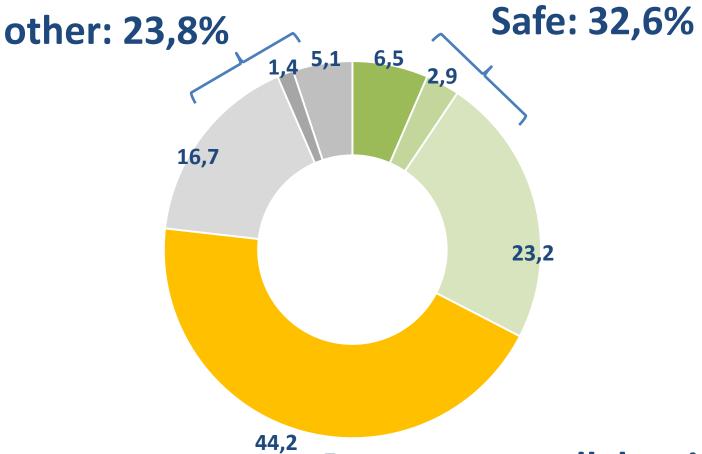
The average annual individual effective dose of anthropogenic radiation for residents of a village located in the territory subjected to radioactive contamination due to the accident at the Chernobyl nuclear power plant is 3 mSv/year. Your good friends living in the city said that they want to send their primary school child to the grandmother living in this village for the summer and ask you for advice. Please choose which one of the proposed options most accurately reflects your point of view.

## SUMMER IN THE VILLAGE?

- It's safe
- It's safer than staying in the city (additional)
- Is quite safe with application of some measures
- The doses in this village are low, but it is better to find another place for the child
- I don't want to take responsibility for someone else's child
- I lack the sufficient knowledge on that matter
- Other

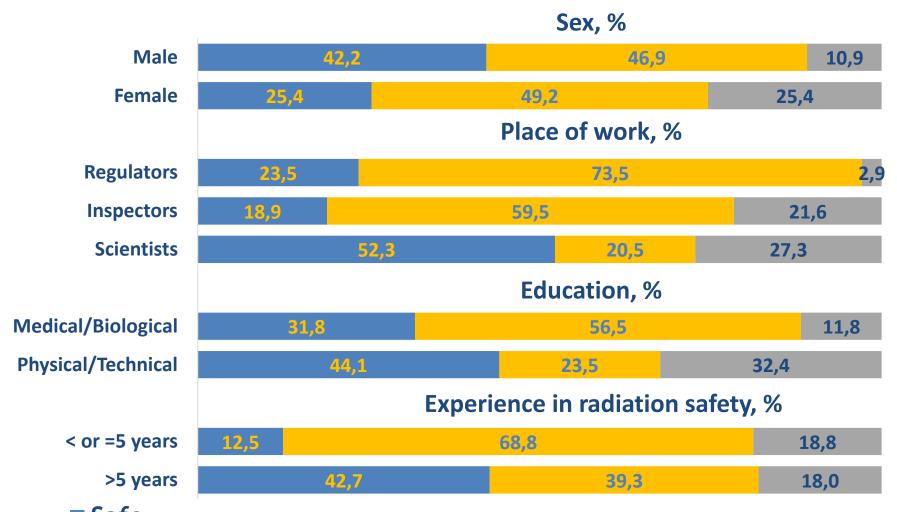
## **SUMMER IN THE VILLAGE?**





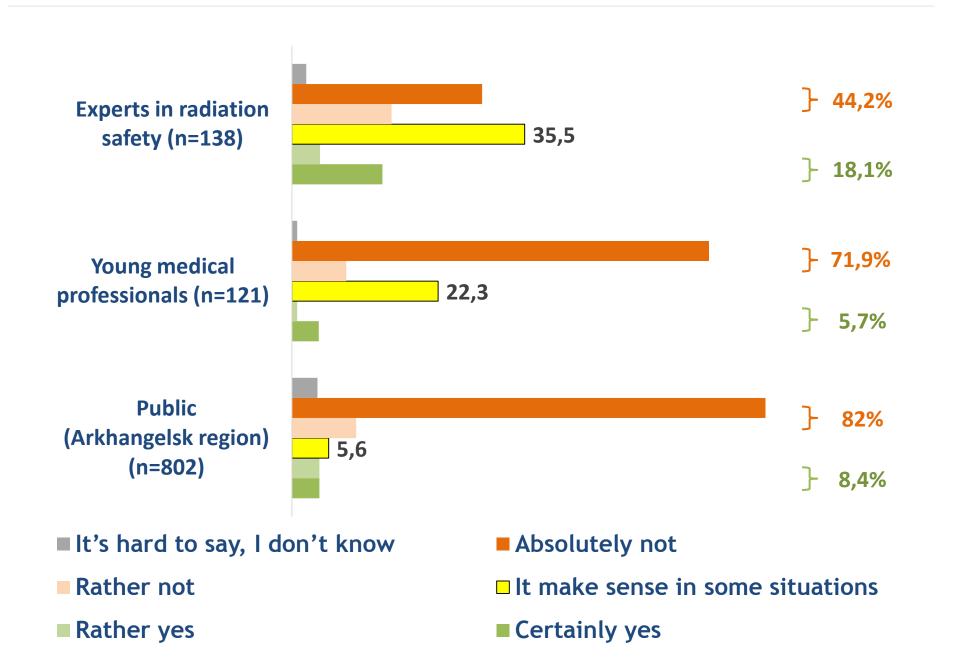
Doses are small, but it's better to find another place

#### SUMMER IN THE VILLAGE?

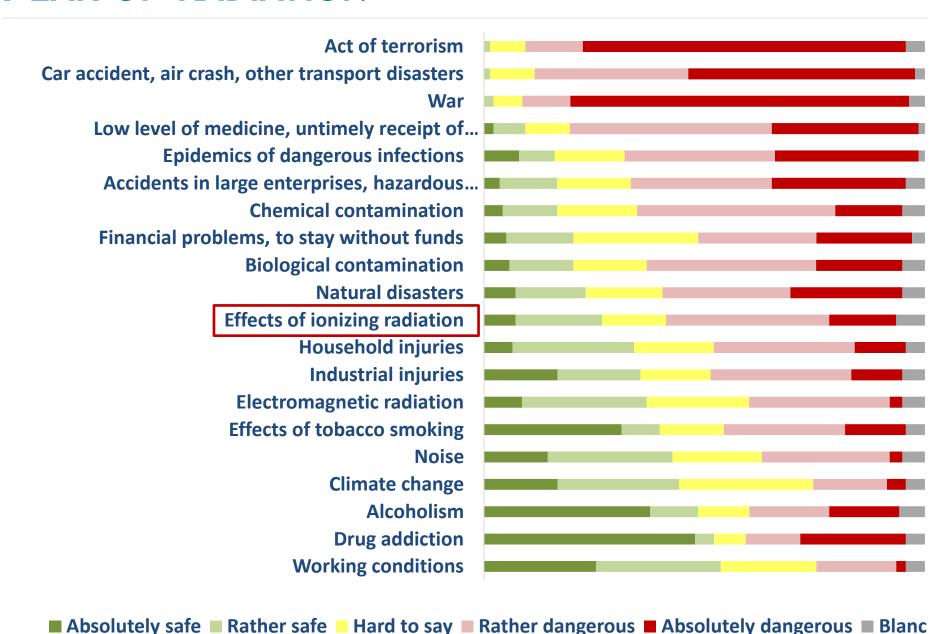


- Safe
- It's better to find another place
- Don't want to take responsibility, lack of information, other

## RIGHT OF AUTHORITIES TO RESTRICT INFORMATION



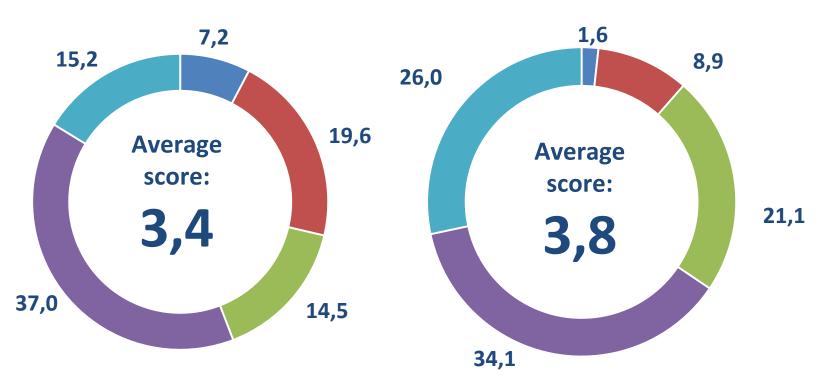
#### FEAR OF RADIATION



## FEAR OF RADIATION

#### **SPECIALISTS**

#### YOUNG MEDICAL STUDENTS



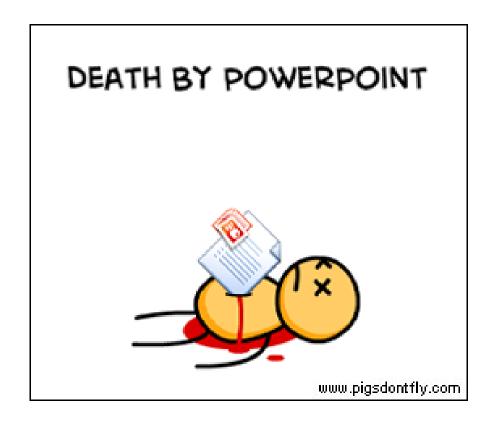
- 1 absolutely safe
- 3 hard to say
- 5 absolutely dangerous
- 2 rather safe
- 4 rather dangerous

## **CONCLUSIONS**

The specialists are human beings too: reason or feelings?



## THANK YOU FOR YOUR ATTENTION!



## THAT'S ALL!

